DOCUMENT RESUME

ED 083 173 SP 006 964

AUTHOR Schwartz, Henrietta S.
TITLE Contrived Role Playing and Attitude Change.
PUB DATE 28 Dec 72
NOTE 38p.; Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, Louisiana, February 1973

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Changing Attitudes; Cocurricular Activities; Debate; *Dramatics; *High School Students; *Role Playing; Self Concept

ABSTRACT

This study asked whether structured role playing and attendant experiences in extracurricular play productions were predictably associated with attitude changes in high school students. The major hypothesis was that students who participated in plays would become more open-minded and flexible and would show greater change toward more positive attitudes about self, others, teachers, achievement, and cultural relativism than students in debate activities or nonparticipants. Quantitative data analyses supported the hypothesis at the .05 level. Qualitative data revealed which task experiences contributed most to positive change. The study suggests system changes and reallocation of resources if schools are to promote positive values. (Author)

CONTRIVED ROLE PLAYING AND ATTITUDE CHANGE

by

Henrietta S. Schwartz
University of Chicago

December 28, 1972

For presentation at
the American Educational
Research Association Meeting,
February, 1973

The Problem and the Theory

Much of the recent public criticism of American high schools has focused on the necessity for, and the inability of, educators to guide students in acquiring a repertoire of functional attitudes, values, and beliefs. The terms, attitudes, values, and beliefs are used interchangeably in the literature or are subsumed under the generic term "attitudes." The term attitudes is used in this general sense here.[1] A review of the theoretical and empirical literature in education, psychology, sociology, and anthropology revealed that what students studied in school apparently did not influence their attitudes at all markedly, but that what they did might. The formal curricular program of the school seemingly had little systematic effect on the building of a moral belief system. Numerous psychologists urged that, while one could not teach attitudinal behavior, one could offer appropriate models for identification or a series of experiences from which attitudes were likely to be derived.

Social, psychological, and anthropological theories, particularly task experience theory, supported this notion of experience-derived attitudes by postulating that as one worked at a task he acquired or changed attitudes that were specific to the task in which he was engaged. According to Breer and

---

[1] Leon Festinger, When Prophecy Fails (Minneapolis: University of Minneapolis Press, 1956), p. 6. An attitude is a notion of the desired, which may or may not induce action. Attitudes are composed of knowledge, judgments, and cognitions which lead to taking a position on an issue. An attitude is informational.

Locke,[1] the chief psychological mechanism for the acquisition or change of attitudes was learning. The processes of attitude change through task experiences are much like the techniques of operant conditioning. The public display of a mode of behavior accompanied by specific attitudes evoked reactions from others perceived by the subject as a reward or a punishment. Successes on the job promoted more positive responses toward those patterns of behavior which were rewarded. Social controls functioned to approve or reject the attitudes and those behaviors attendant to them. Cognitive dissonance theory also endorsed the idea of experience-derived attitudes. As an individual engaged in behavior discrepant with his attitudes, he experienced dissonance. To reduce the tension, the subject would change behavior, tasks, or attitudes to eliminate the dissonance. Sometimes the subject would escape the field to avoid the conflict situation. Dissonance theory might provide an alternate explanation for attitude changes, but the theory is limited in predicting which ways of reducing dissonance one will use, or which tasks will create or reduce dissonance.

The purpose of the present study was to investigate the assumptions of task experience theory in the complex field setting of public high schools. It seemed that activities in the public high school which promote task experiences leading to positive attitudes tended to be centered in extracurricular activity groups engaged in athletics, fine and performing arts, and speech and debate. The effects of some of these activities on student attitudes were the focus of this study. The major question to be answered was whether one type of structured role playing and its attendant experiences were predictably associated with attitude

---

[1] P. E. Breer and E. A. Locke, Task Experience as a Source of Attitudes (Homewood, Ill.: The Dorsey Press, 1965).

change in a selected group of high school students. That is, did those high school students who participated in the task experiences associated with the production of the play The King and I show greater change toward more positive attitudes about Self, Others, Teachers, School, Achievement, and Play Content than did students in debate and speech activities or students who did not participate in any extracurricular activities? Did the play participants change more and become less dogmatic, less rigid than students in other groups?

Task experience theory provided the basic conceptual approach to the problem, because it offered a structure to synthesize the complementary insights provided by psychological, social, and cultural explanations of attitude acquisition and change. The theory acknowledged anthropological contributions by assuming that the range of experience one normally engaged in along with the range of attitude change exhibited, was restricted by the culture's view of acceptable behavior patterns and attitudes. Certain attitudes and behavior may be acceptable, even valued, by one culture, only to be rejected by another. The theory encompassed sociological constraints by agreeing that tasks and roles common to one level or segment of society may be perceived as inappropriate for another. Task experience theory acknowledged its debt to psychology, particularly learning theory, by maintaining that the primary mechanisms for the acquisition or change of attitudes were reinforcement and generalization.

Each of the three student groups in this study was exposed to rewards and sanctions to control behavior and change attitudes. But in terms of the set of attitudinal variables considered here, play production participation seemed to produce more positive attitude change than participation in speech and debate and non-participation.

Design and Methodology

The treatment play, The King and I, was chosen for two reasons. First, it was a play performed each year by high school and amateur play production groups across the nation, allowing for some possibility of generalization. Second, and more important, content analysis revealed that the play script made very positive statements about the value of education, the worth of teachers, and the need to understand the diversity of cultures, and thus promoted a kind of primitive cultural relativism. The play content forced students to verbalize beliefs and simulate behaviors not congruent with their middle-class American attitudes and values. All but eight of the students among the role players were required to portray Siamese characters, proud, intelligent, charming people with attitudes and behaviors very different from those of Westerners. The verbal and motor behaviors during rehearsals and productions were fixed by the task. Assuming dissonance was created for the American students playing Siamese, and assuming students were committed to the task, to reduce the tension created by the demanded discrepant behaviors, a closed attitude set toward foreign cultures would have to change, to expand. The treatment activity and the script content exhibited many of the elements Rokeach[1] considered necessary to promote openmindedness and flexibility in world view. Also, cooperation and a sense of shared responsibility to the group and the director were demanded by the task. Consequently, they became

---

[1] M. Rokeach, The Open and the Closed Mind (New York: Basic Books, 1960), pp. 395-98. The variables Rokeach considered necessary to promote openmindedness and built into the tasks of play production are: 1. The ability to remember. 2. The ability to "play along" and entertain new systems. 3. The freedom to take the time and to use the techniques and trials necessary to master a new system. 4. The ability to integrate new and old learnings.

primary values of the group. The play could not be produced by one student, nor could a group of students produce the play without faculty expertise and coordination and faculty access to the resources of the school organization and administration. Peer approval and acceptance, commendations from the director, and positive responses from the audience accompanied the rehearsals and public performances of the play. Security and status resulted from membership in the play production group to those students who worked cooperatively with others and diligently performed complex tasks. The successful completion of the production demands should encourage students to be more positive toward others in the group without whom their individual success would not have been possible. These rewarding interactions should make play production participants more accepting of individual differences, less concerned with status distinctions and more open-minded. Conversely, the actor who did not learn his lines, delayed rehearsals, confused other members of the cast, and violated the norm of mutual dependence was chastized, ostracized, and eventually expelled from the group. The participants were made to meet their responsibilities to others in the company, to value them, or they were removed. The theory emphasized the impact of the total situational context of the experience of play production on attitude change. The assumption was that specific attitude changes were a function of a series of stimulus tasks and associated patterns of operant conditioning, positive and negative reinforcements, related to the shared ordeal of the total task--producing a play.

Play production activities were chosen as a treatment because the nature of the task experiences made very definite demands upon participants. The structure of the treatment, the demand characteristics of the task made cooperative modes of

behavior more functional than independent action.[1] Though the immediate aim of the activity was to produce a musical play with high school students, it was postulated that participation in the tasks would promote positive attitude change. Indeed, sponsors, administrators, students, and others spoke of this effect as one of the educational benefits of the activity when requests were made to have it supported from the school budget. Students had to work cooperatively, had to meet deadlines for task completion, had to role play, had to memorize lines, had to perform publicly, etc. No single individual could have produced this play without the willingness of others to perform an assigned task. The interactions and reward structure of the experience provided opportunities for students to enhance their self-esteem and their opinions of other people. Additionally, the situation, script, and tasks supported the notion that effort, not luck, would lead to task completion and success. Accordingly, the tests, interviews, and observations were designed to measure changes in Dogmatism and Rigidity, and Attitudes toward Self, Others, Achievement, School, Teachers, and Play Content.

---

[1] Breer and Locke maintain that the theory is most appropriate for those situations in which an individual is free (or obliged) to engage in a certain amount of experimentation. Janis calls this "improvisation." The experimentation with the task is done before deciding what one's strategy will be. "The importance of trying something at least two different ways is that it helps to make salient the fact that some ways of doing things are more effective than others, that some models of behavior are preferable to others, and that some approaches to the task are more appropriate than others. Without some form of contrast, it is less likely that the individual will develop sharply defined comparative judgments of a cognitive, cathectic, and evaluative sort." (Breer and Locke, op. cit., pp. 261-62.) Play rehearsals allowed the experimentation and improvisation that precede judgments. Debate and classroom activities at the two schools seemed to offer less freedom to experiment with trial solutions to problems. Play participants could compare behavior and select the most effective and efficient mode.

The selection of the schools and students was done early in 1968. With the assistance of the publishers, contacts were made with twelve high schools producing the play in the Midwest in the spring of 1968. The two Catholic schools in the group were used to pilot-test the instruments. Of the three public schools that agreed to participate, one had no speech and debate group. Consequently, two suburban schools in metropolitan Chicago were selected. North High began rehearsals March 1, 1968, and produced the play the weekend of April 26, 1968; South High began the week of February 27, 1968, and produced the play during the week of May 2, 1968.

The coeducational groups in both schools, including a total of 302 students, took the complete battery of pre- and post-tests. All students participating in the two productions of The King and I were included in the treatment group (N = 144). Students in both schools participating in extracurricular debate and speech activities were in Control Group I (N=78). The speech and debate activities had some of the same characteristics of the play production treatment, including a common content area, about the same amount of practice time, public performance, and some expression of discrepant beliefs, but not the structured role playing, group interaction, or cooperative work mode of the treatment group. Debate students could prepare and rehearse alone or with the faculty coach and/or with their partner. Play participants had to rehearse together to achieve proper staging, choral delivery, dance sequences, and production tasks. Though each would prepare for rehearsals individually, the behavior was practiced and corrected in a group setting. An actor had to be cued in on his lines by another actor or group of them. A single performance was meaningless until set in the context of the total play. Control Group II (N=80) included students in both schools

who were not participating in any extracurricular activity. (Because these nonparticipants volunteered to participate in the study, they may not have been representative of the total non-participant student group.)

The play production students spent about 150 hours in after-school time in acting rehearsals, crew work sessions, music and dance practice, and other tasks common to amateur theatrical groups. These tasks and the rewards and sanctions related to the tasks, made specific to a particular play (The King and I), were seen as the experimental treatment. Students were directed by faculty members who had some expertise in music or drama and who volunteered to sponsor the groups. The faculty members, seen from the standpoint of the research as positive role models, received some compensation for directing the activity.

During the rehearsal period at both schools, debate students gathered and prepared materials on a common topic for public delivery at a series of school, regional, and state contests under the direction of a faculty sponsor. The "playoffs" in the state debate tournament were held during the rehearsal period. The nonparticipants followed their customary routines.

The responses of administration, students, community, and others to the public performances and school activities of the three groups were investigated to provide insights into the varying reward structures and to help explain trends in the test data. During the five-month period, observations were made at North and South High to generate information about school climate, the status and support of the extracurricular activities under study, faculty response to the activities, rehearsal procedures, classroom systems, and other facets of life at both schools. Interviews were conducted with faculty members, students, leading actors, members of the crew, and a small number of students from

the debate group and the nonparticipant group at each school. The students and faculty were told that the purpose of the study was to measure the attitudes of students who did and did not participate in extracurricular activities.

Tests were administered to all three groups at both schools at the beginning of the rehearsal period and again after the public performance of The King and I. The instruments selected to measure the attitude changes were:

Acceptance of Self and Others Inventory--Berger, 1952

Dogmatism Scale--Rokeach, 1964

Rigidity Scale--Gough-Stanford, 1964

The High School Attitude Scale--Remmers, 1960

Attitude Toward Teachers--Schwartz, 1968

Attitude Toward Achievement--Breer and Locke, 1965

Attitude Toward Content of Play--Schwartz, 1968.

Pre- and post-tests were administered under comparable conditions at both schools. All pre-tests were administered the first week of play rehearsals at both schools by the investigator. School faculty members were not present during the tests. Post-tests were administered the week immediately following the last public performance under the same conditions as the pre-tests. During all measures, observations, and interviews, care was taken not to destroy the naturalness of the field situation, or to intrude on the activities of the school or the groups. The measures of attitude change obtained are gross. No attempt was made to impute causation to any single factor in the treatment. Rather, the total set of task experiences of play production was considered as the change agent. Interview and observation data gave some insights into the processes in the treatment which may have contributed to attitude change. While the theory did not permit focusing in on the effects of one single task experience, certain

constellations of related experiences could be examined. For example, the set of tasks involved in acting or role playing distinguished one group of play production participants from non-role playing participants. But the major focus of the study was the relationship between the total set of play production task experiences and the change in attitudes of all participants.

Membership in the treatment group and the two control groups reflected, in important measure, student self-selection; therefore, it was impossible to randomize the sample. To compensate, analysis of covariance was used to control for initial differences among the groups on the eight dependent attitude variables. In fields of research where randomization is not possible and where matching subjects is not feasible, a covariance adjustment may be tried for the x variables that have not been matched.[1]

All of the eight variables had been obtained from the same students and might be correlated in some unknown manner. That is, a change lowering the dogmatism score should be reflected in a change increasing the score representing the attitude toward others. Because of the possible relationship among several of the eight variables, a multivariate analysis, the MESA-97[2] computer program, was used to evaluate the data and the significance of changes from pre- to post-test scores by groups of students.

Findings and Discussion

In keeping with the theoretical rationale and the questions to be answered by the study, the variables were ordered

---

[1] William G. Cochran, "Analysis of Covariance," Biometrics, XIII, No. 3 (September, 1957), 264.

[2] Jeremy Finn, Multivariance: Fortran Program for Univariate and Multivariate Analysis of Variance and Covariance (Buffalo: State University of New York, 1967).

(1) Attitude toward Self, (2) Attitude toward Others, (3) Dogmatism, (4) Rigidity, (5) Attitude toward Achievement, (6) Attitude toward School, (7) Attitude toward Teachers, (8) Attitude toward the Content of the Play. Briefly, it was assumed on the basis of self-selection and participants' ego involvement in the task and certain reinforcement patterns (peer approval, adult praise, positive audience response, etc.) that the attitude toward self would likely undergo the most positive change after the success of the public performances. The pervasive sense of shared ordeal, mutual dependence and comradship suggested that attitudes towards others would also evidence positive change. The impact on students of role playing Siamese people and the verbalization of attitudes of respect toward other cultures embodied in the content of the play implied a positive change in dogmatism and rigidity. But these variables could be influenced by play production tasks other than role playing. The interesting question was, what effects might be due to the impact of the script, the content of the play, and what effects might be due to the production process? The last four variables, the worth of hard work, education, teachers, and cultural relativism were emphasized in the script. These variables were ordered last in order to obtain some estimate of the effect of the content of the script on students' attitudes.

The major hypothesis tested was that students participating in structured play production task experiences associated with the production of the play The King and I would show greater change toward positive attitudes along the eight variables than would students in the two control groups. In ordering the tests, it was assumed that students who participated in any kind of an extracurricular activity would be different in attitude set from nonparticipants. The question of greatest interest was to

discover if there was a difference in the effects of one extra-curricular activity over another. Which group, debate or play production participants, would show the most positive overall attitude change at the end of the treatment period? The general analysis of the major hypothesis concerning between-group attitude change ordered the tests as follows:

1. Play production group members would evidence more change toward positive attitudes along the eight variables mentioned above than would members of the nonparticipant groups.
2. Play production group members would evidence more change toward positive attitudes along the eight variables mentioned than would members of the participant debate and speech groups.
3. The testing for interaction among the dimensions of the study would indicate that the groups could be considered independently.

All three hypotheses were supported at the .05 level of significance. As a group, play production participants did experience greater positive attitude change along all eight variables identified than did participants in speech and debate or nonparticipants. (See Tables 1 and 2)

The other assumptions tested dealt with the differences within the play production group, with the effects on attitudes of the type of task performed and the duration of experience in the group. It was hypothesized that:

> Newcomers to the production group would change more than those members with previous role playing experience. Students who volunteer to participate in play production activities will be more alike in their attitudes initially than would the students in either of the control groups. However, members of the treatment group who had previous experience should have acquired those attitudes associated with the tasks of play production. They should have higher self and others pre-test scores and be more realistic in their attitudes toward achievement than play participants new to the experience.

People who played roles would manifest more attitude change than would the non-role playing members of the crew. The impact of role playing and verbalizing the discrepant attitudes expressed by the Siamese in the script should result in actors evidencing greater attitude change than the non-role playing members of the group.

Students in major roles would express attitudes more congruent with those of the character they portrayed at the end of the production period than they evidenced early in rehearsals. The frequency of reinforcement and the impact of behavior on attitude change is considered in this hypothesis. As the major role players rehearsed their characterizations and spoke discrepant beliefs, the tension created by the dissonance between covert attitudes and overt behavior might result in attitude change.

In the treatment group analysis, the sample of students in both schools in the play production group was 140. With one minor exception, the two hypotheses concerning within-group differences were not supported by the analysis of the test data. That is, (1) newcomers to the play production group did not change their attitudes more than did those members with previous experiences in the group, and (2) role players did not evidence more attitude change than did crew members of the company. The single exception was the Dogmatism variable. In both tests this variable was significant at the .05 level. Along this one dimension major role players and newcomers to the group changed more and became less dogmatic than crew members and experienced participants who were not major role players.(See Tables 3 and 4)

The last hypothesis, concerning the attitude change of students playing leading roles, was not investigated through an analysis of the test scores, for the sample was too small. Rather, interview and observation techniques were used to assess the effects of playing a major role on the students' attitudes. According to comments by the students themselves, students with major roles who were called upon to express discrepant attitudes

TABLE 1

PLAY PRODUCTION GROUP MEMBERS VS. NONPARTICIPANTS IN DEGREE OF ATTITUDE CHANGE, CONTRAST 3

Attitude Variabl	Univariate F	Step-Down F	P Less Than	Standardized Discriminant Function Coefficient
P) Self	0.4526	0.4526	0.5017	-0.1242
P0 Others	1.0947	1.1805	0.2782	-0.2368
P) Dogmatism	14.9116	13.4657	0.0003	0.9176
P) Rigidity	2.7124	0.1289	0.7199	0.1185
P) Achievement	0.4787	0.0237	0.8777	0.1487
P) School	0.0205	0.5016	0.4794	-0.1783
P0 Teachers	0.4672	0.2710	0.6031	-0.1341
P) Content	0.0031	0.0058	0.9392	0.0199

F-Ratio for Multivariate Test of Equality Mean Vectors = 1.9849

P less than 0.04.[a]

Degrees of Freedom = 8 and 281.

[a]Significant at the .05 level.

TABLE 2

PLAY PRODUCTION GROUP MEMBERS VS. PARTICIPANTS IN DEBATE AND SPEECH IN DEGREE OF ATTITUDE CHANGE, CONTRAST 4

Attitude Variable	Univariate F	Step-Down F	P Less Tha	Standardized Discriminant Function Coefficients
PO Self	.1.5411	1.5411	0.2155	-0.1995
PO Others	0.2026	0.1395	0.7091	-0.8201
PO Dogmatism	0.6016	0.6709	0.4135	0.3123
PO Rigidity	0.3313	1.0996	0.2953	-0.3290
PO Achievement	2.2469	4.5626	0.0336	1.1944
PO School	0.0164	0.1683	0.6820	-0.0511
PO Teachers	6.6540	6.7984	0.0097	-0.6867
PO Content	0.4455	0.4269	0.5141	-0.1717

F-Ratio for Multivariate Test of Equality of Mean Vectors = 1.9445.

P less than 0.05.[a]

Degrees of Freedom = 8 and 281.

[a]Significant at the .05 level.

TABLE 3

ROLE PLAYERS VS. CREW MEMBERS IN DEGREE OF ATTITUDE CHANGE

Attitude Variable	Univariate F	Step-Down F	P Less Than
PO Self	0.2251	0.2251	0.6360
PO Others	1.8887	1.6558	0.2006
PO Dogmatism	4.5948	5.3798	0.0220
PO Rigidity	0.0985	0.1911	0.6628
PO Achievement	0.0485	0.0390	0.8439
PO School	1.9222	0.9101	0.3420
PO Teachers	0.3451	0.7424	0.3906
PO Content	1.4939	1.3172	0.2534

F-Ratio Test For Equality of Mean Vectors = 1.3028

P less than 0.2485.[a]

Degrees of Freedom = 8 and 121.

[a]Not significant at the .05 level.

TABLE 4

EXPERIENCED VS. INEXPERIENCED MEMBERS OF THE PLAY PRODUCTION GROUP IN DEGREE OF ATTITUDE CHANGE

Attitude Variable	Univariate F	Step-Down F	P Less Than
PO Self	0.5555	0.5555	0.4575
PO Others	0.0012	0.0331	0.8560
PO Dogmatism	4.0997	3.9969	0.0478
PO Rigidity	0.3097	0.0406	0.8407
PO Achievement	0.1253	0.1036	0.7481
PO School	0.8078	0.1743	0.6771
PO Teachers	0.7314	0.4241	0.5162
PO Content	0.9939	1.0868	0.2993

F-Ratio for Multivariate Test of Equality of Mean Vectors = 0.7883.

P less than 0.6139.[a]

Degrees of Freedom = 8 and 121.

[a]Not significant at the .05 level.

and beliefs did not change their private beliefs to coincide with those of the character they portrayed. While they may have become more tolerant of other's attitudes and less ethnocentric, this does not mean that they would tolerate this behavior in their own culture. They apparently did not adopt single attitudes outside the range of cultural acceptability. Perhaps the dissonance created by verbalization of these beliefs was reduced by the "underlying cognition"[1] that they did not have to believe everything they said on stage. Debaters seemingly called upon the same mechanism to rationalize their public advocacy of attitudes they did not hold as did the debaters in the Aronson study. Four ancillary questions were posed to help clarify trends in the written test data. Interviews and observation data were consulted to provide some insights to these questions.

1. Which task experiences natural to amateur theatrical groups seemed most effective in inducing students to cooperate, to value self, and to respect others?

It seemed that the task experiences most likely to induce play production students to cooperate, value self, and respect others were those tasks which required mutual dependence on others, provided reinforcement for tolerant behavior, and rewarded commitment to the task. The high expectations of the faculty sponsors were communicated to, and apparently internalized by, students. The visible nature of the play production rehearsal tasks made the reinforcement for task completion immediate and systematic. For example, when actors had memorized lines, the rehearsals flowed smoothly and brought satisfaction and praise from peers and the director. A well executed prop, an appropriate

---

[1]Elliott Aronson, "The Theory of Cognitive Dissonance," in Leonard Berkowitz (ed.), Advances in Experimental Social Psychology (New York: Academic Press, 1969), pp. 2-35.

costume completed on time was visible and complimented. Conversely, all else being equal, an unrehearsed dance, an unlearned speech or song, an incomplete set, an unfinished costume were evidence of lack of commitment and attention to an assigned task necessary to production. The behavior which indicated a violation of group norms and expectations, the failure to meet one's responsibilities brought immediate punishment, social ostracism, scoldings from the director, etc. If this deliberate failure was repeated frequently, exclusion from the group and the activity was imposed.

Interview data provided examples of the consistency of the internal reward structures of the groups. Rehearsal observations revealed that well performed songs, dances, or scenes almost always brought applause from the company and verbal praise from the director. The data emphasized the pride students had in being selected for membership in the group and the special positive nature of the relationship with the faculty sponsor. Each play participant had been chosen to perform a given task and a faculty member had publicly expressed faith in the individual's ability to perform competently. The student could meet these expectations and increase self-esteem by devoting time, energy, and talent to the project. The faculty members' expectations were met by the students, the plays were produced, and the efforts were applauded. The student's self-esteem was increased and the behaviors and attitudes involved were reinforced. Students interviewed recognized during the course of rehearsals that they needed the assistance and talents of others to accomplish the tasks of play production. This need apparently led to a mutual dependence and a degree of involvement in the tasks which promoted a cooperative attitude and a greater recognition of the worth of others. Observations showed the anticipated rewards

for completed tasks were dispensed regularly by the faculty directors and students, as were sanctions for failure to perform as expected. The observed public praise of performances served to reinforce the benefits of cooperative effort, the worth of self and others, and the commitment to the task in the future.

2. Which activities best related effort to achievement in a realistic fashion?

The question of which activities best related effort to achievement in a realistic fashion had to be considered in relation to the work mode of the groups. The play production participants had to cooperate. Limited interview data suggested that the speech and debate participants looked upon members of their own team as potential competitors and tended to work independently. Observations of and interviews with the play participants suggested that those tasks which involved all members of the cast and crew in the planning and execution of the activity best related effort to achievement. Seemingly a voice in the decision-making and planning as well as the execution of the task gave participants a greater sense of control and the opportunity to establish the criteria, mode, and reward for completion of a specific task. Apparently this involvement allowed participants to see the link between a given amount of effort and the achievement of a task necessary to produce the play. Further, those activities which had predictable rewards associated with effort tended to make students believe that their individual and combined efforts, not luck, led to success. The external rewards, audience response, public notice, status in the larger school/community were less systematic and predictable than the internal reinforcement provided during the rehearsal period. Seemingly, the rewards offered by outsiders, community, students, and administration at North High were capricious and tended to make faculty and

students believe that the hard work put into the production was wasted. The observations and interviews explained why it was that students at North became slightly less realistic and less positive in their attitudes toward achievement[1] and school than those at South. Anticipated and consistent rewards observed and reported at South High seemed predictably correlated with the more positive attitudes toward achievement and school evidenced by this group's scores.

The highly competitive mode and experiences of debate appeared more likely to convince students that hard work and individual effort would be rewarded by success. The competitive debaters, poised, self-confident, and self-reliant, were the most highly achievement oriented of all groups and the test scores indicated they became more so while engaged in the experiences of debate.

3. How supportive of the activity were the administration, the faculty, the student body, and the community?

Because the response of outsiders was important in the reward structure of the activity, differences in support levels might explain differences in attitudes among participants. Differences in support levels were identified by examining the responses of the administration, the allocation of resources to support future activities of the group, the status of faculty sponsors before and after the public performance, the willingness of other faculty members to participate in and praise the activity, and the attention given to the activity in the school and community press. The school and community newspapers, congratulatory

---

[1] It should be remembered that the instrument used to measure achievement attitudes was designed to measure the individual's sense of achievement. It is possible that this instrument may not be able to measure accurately the sense of collective achievement evident in the work mode of the play production group. The design of the instrument may favor the individual work mode of the debate and speech participants.

messages, and faculty responses were examined. The degree of support for the activity by the total school/community was estimated by observation and examination of these statements and those of the administration at both schools. Interviews and observations indicated that the differences between the perceived support at North and at South High seemed directly related to the play participants' perceived rewards for the time and effort invested in the task. While both school communities seemed supportive and gave status to the play production activity, the group at South High received more tangible and consistent supports and rewards than did the group at North. The differences in the reward structures at the two schools perhaps were mirrored in the slightly more positive attitudes shown by students at South toward school at the end of the experience. The generalization of this task reward effect, implied as it is, seemed logical in the light of the situational context of the two schools.

4. Was there a degree of rigidity or dogmatism[1] in the personality structure of the play production participants which could not be influenced by the task experiences?

There seemed to be a degree of rigidity--adherence to single attitudes or particular cultural values--which was not responsive to attitude change through the play production experiences. Rigidity must be interpreted in light of cultural norms. One becomes a member of a culture by internalizing a set of beliefs and attitudes characteristic of one's culture. These

---

[1] Rokeach, The Open and the Closed Mind. Dogmatism is defined as a system variable; a dogmatic individual is characterized by a closed attitudinal set built by fear and anxiety. This attitudinal set is highly resistant to change. Dogmatism refers to the open or closed nature of a total system of beliefs. Rigidity is a characteristic of the elements within an attitudinal set and refers to the resistance to change of a single attitude, a single belief construct.

core values[1] are highly resistant to change and anthropologists characterize persons who reject their culture's sacred beliefs as marginal members of the culture. To Americans polygamy is legally and morally unacceptable; romantic love is an appropriate basis for marriage; women are not genetically inferior to men; equality demands that no man should have to bow before another. Yet during the course of the rehearsals of The King and I, students who played leading roles were called upon to verbalize these and other discrepant beliefs and attitudes or engage in behavior that would be deemed unacceptable in real life in their own culture. They were asked to speak and behave in ways contrary to their attitudes and beliefs over and over again during the rehearsals and performances. According to dissonance theory, this behavior might have resulted in some specific attitude changes.[2]

In light of the test and interview data, apparently attitude change along specific dimensions did not occur. These student actors did not condemn the unacceptable attitude or behavior of the character they portrayed, though some students had difficulty in simulating the behavior and in memorizing certain lines. What the experiences may have done was to make the participants less dogmatic, to expand the structure of their belief systems to include other elements.[3] They generally were openminded about the fact that other people had different life styles and tried rationalizing unacceptable behavior in the characters they played. They endorsed those single attitudes consonant with culturally acceptable sets of values. That is,

---

[1] Francis L. K. Hsu, Psychological Anthropology (Homewood, Ill.: Dorsey Press, Inc., 1961), pp. 251-304.

[2] T. Brock, "Cognitive Restructuring and Attitude Change," Journal of Abnormal Social Psychology, LXIV (1962), 264-271.

[3] Rokeach, The Open and The Closed Mind.

the practice of polygamy was outside of the acceptable attitudinal and behavior patterns of the students playing Siamese. Students rationalized this behavior, reduced it in importance: "It's the custom of the country, but it's wrong," or "The King really doesn't have time to be a real husband to so many women." They refused to consider the reality of the attitude or the discrepant behavior by indicating they were playacting and were not expected to believe everything they said and did on stage. It may be that the leading players when confronted with the culturally unacceptable behavior or attitude rationally thought through the consequences of acting upon the unacceptable attitude in American culture and rejected the attitude and the behavior as dysfunctional in off-stage life. There seemed to be a degree of rigidity not touched by the experience. But this may be the rigidity necessary to maintain one's personal and cultural identity.[1] When the content of the message agreed with an attitude of their own or was culturally familiar and acceptable, seemingly the information was incorporated, enhanced, and usually induced greater response than an unfamiliar attitude.

For example, the female lead, Anna, was described by all actors interviewed as a warm, wonderful person, like the female director at one school, like a mother at the other. However, in the play the character's behavior was at times waspish, petty illegal, and suggestive of an extramarital romantic association with a man of another race. Each of these features of the character was incongruent with the mores of the middle-class suburban white teen. When the students were questioned about their perceptions of these aspects of the character, they excused, rationalized, or rejected the suggestion of wrongdoing on

---

[1] Ronald Taft, "A Psychological Assessment of Professional Actors and Related Professions," Genetic Psychology Monographs, LXIV, No. 2 (November, 1951), 385-416.

the part of the Teacher-Mother character. They answered by lauding the character's generosity, warmth, romanticism, and intelligence. Teachers and mothers were "good" and their occasional little faults were far overshadowed by their "goodness." Students seemed to become more openminded, tolerant of people not of their culture who did bizarre things, but seemed unwilling to bend sufficiently to change some single tenets of their own belief structure. The rigidity of single almost sacred attitudes was particularly apparent when students were asked to relate specific values of American culture to discrepant behavior called for by the part played.

Within the play production group test score comparisons, there was some evidence to indicate that extensive role playing does tend to make participants less dogmatic. Debaters began as less dogmatic than the other groups, but seemingly changed little during or after the round of debate activities. It may be that the activity attracted openminded individuals initially, but did little to make them more openminded.[1]

Perhaps the most provocative trend was that which indicated that nonparticipants at both schools became more dogmatic from pre-test to post-test during the same period. All the other groups, with the exception of the debate group at South, became less dogmatic. The inference might be drawn that the school experience, without the less formal interactions provided by extracurricular activities, seems to make students more closed-minded. However, without knowing more about the effects of personality, home community, socio-economic characteristics, etc., the notion remains speculative.

---

[1] Helen Ann Cohen, "The Psycho-Social Correlates of Cognitive Differences in Adolescents" (unpublished Ph.D. dissertation, University of Chicago, 1964). This study indicated that students with high creative ability were better able to tolerate confusion,

Conclusions

Attitudes serve as selection mechanisms to help the young order their world and choose among the objects in the environment while influencing the subsequent response to the objects. Attitudes are cognitive;[1] they contain an evaluative component which influences judgments in decision-making situations.[2] The "nature-nurture" controversy which enjoys a periodic revival in social science literature, particularly in that literature concerning learning behavior, seems settled in this area. Psychologists, sociologists, anthropologists, and educators seemingly agree that attitudes are learned, and that any normal child or adult can learn any set of attitudes, beliefs, and values under given circumstances. The literature indicates further that attitudes, values, and beliefs are malleable and replaceable with particular kinds of environments and stimuli. If, as Breer and Locke maintain, certain attitudes are acquired and/or changed as a result of specific task experiences as this study seems to indicate, several questions about the theory must be posed.

First, to how many different situations does the theory apply? In terms of this study, if play production groups in other geographic regions, in lower socio-economic levels, in different age groups, or in different cultures were producing the same play,

---

ambiguity, and be more open to new experiences than students with high I.Q. scores. The most important variables in the attitude differences were (a) self-perceptions, (b) peer interactions, (c) family interaction, and (d) work plans for the future. In her study, some debate students were more highly achievement oriented also.

[1]Festinger, A Theory of Cognitive Dissonance.

[2]M. Sherif and C. I. Hovland, "Judgmental Phenomena and Scales of Attitude Measurement: Placement of Items with Individual Choice of Number of Categories," Journal of Abnormal Social Psychology, XLVIII (1953), 135-141.

could the same results be expected? When the play was performed for members of the Siamese royal family in London, they were outraged. The King and I has never been performed in Thailand (Siam); it is banned. In a Japanese version of the play the character of Anna is played as the antagonist rather than as the protagonist. The cultural norms can influence the interpretation of the script and the characters. But it would seem that the tasks required to produce the play (acting, rehearsing, creating scenery and costumes, formal or informal cooperative behavior, etc.) are constants. This speculation needs to be tested in a variety of cultural settings. Reasonably, if the groups were members of the same society one might predict similar results in the variables of self, others, dogmatism, and rigidity. The stimulus variables for change in these areas seem built into the task of producing a play--almost any play. However, if the groups were from different socio-economic classes, the response to the variables of teacher, school, achievement, and play content might be very different.

The stimulus inputs for these variables were contained largely in the play script of The King and I. Only as faculty directors who were also teachers provided positive role models for students in other regions or classes would the test data be expected to reflect more positive attitudes toward teachers. Merely saying that teachers, education, hard work, and different cultures are "good" does not seem to make them "good." Therefore, the stimulus which promotes a particular attitude must be imbedded in the task which is repeated often. Successful completion of the tasks must be consistently and frequently rewarded if the attitude is to be acquired or changed. Sequencing seems to be a crucial factor also. Simple tasks led to more complex ones. The frequency of repetitions of tasks during daily rehearsals

seemed to reduce interference from competing events--even to the point at which schoolwork, homework, and family obligations were neglected by play participants. Additionally, play participants were rewarded for solo, cooperative, and open behavior in a variety of tasks--singing, dancing, acting, crew work, etc. The activity provided many opportunities for generalization of the favorable attitudes. But these rewards were given for the performance of the task, not for the content of the verbal behavior. In this respect dissonance theory did not offer a useful framework for the prediction of attitude change as a result of verbalizing beliefs.[1] Reduction of dissonance is only one of many motives for changes in behavior or attitudes and can be counteracted by more powerful drives. Similarly, because people expect to be tricked by a magician, they are not bothered when he does trick them. When players and audience are informed they are acting or in witnessing a musical comedy, they may not take the content of the play seriously, nor are they often upset with the portrayal by an American high school student of a king with a Siamese harem. Instead, the audience is usually delighted and amused by the bizarre notion. If dissonance theory cannot

---

[1] Aronson, "The Theory of Cognitive Dissonance," p. 27. Dissonance theory is best at prediction not with two cognitions, for ". . . we are usually dealing with the self concepts and cognitions about some behavior. If dissonance exists it is because the individual's behavior is inconsistent with his self concept." In this frame of reference, the less positive attitude toward School and Achievement by North High play participants can be understood. The North students with high self-concepts conceived of themselves as reasonably intelligent people who worked hard, only to be told by the school administration that they were fiscally irresponsible. This dissonant evaluation violated their firm expectancy of a reward for completing a difficult task, violated their self-concept, and made them look foolish. Had the study been designed to compare self-concepts with dissonant behavior, the theory would have allowed prediction of attitude outcomes.

predict attitude change as a result of conflicting verbal behavior, neither can task experience theory, except perhaps in those situations where the mode of behavior (independent-collective, cooperative-competitive, etc.) is intrinsic to the task and consistently rewarded.

The next question which must be asked is: How many different facts or phenomena will task experience theory explain, and under what conditions will it hold? The empirical work based on the task theory is limited, and this study seems to be the first to use the theory in a natural or field setting. But the design is comparable to other empirical work on the effects of role playing on attitude change in that it examines a systematic use of role playing (and attendant experiences) as a device for inducing attitude change outcomes. Though those administering the activity were not doing so specifically to effect attitude change, the tasks of play production incorporated the experimental treatment. While the tenets of the theory allowed broad predictions to be made about the gross attitudinal behavior of groups engaged in different tasks, the relationship between a stimulus and an effect is not indicated. It would be premature and presumptuous to say that the process of role playing resulted in openmindedness or that identification with the teacher director resulted in positive attitudes toward teachers. The theory is not a scalpel; it is at the broadsword stage. To hone the instrument to a fine cutting edge requires much more empirical and theoretical work. It would be necessary to examine the relationships between task experiences and particular attitudes and the attendant reward structures. Then a suitable series of instruments for measuring differences in task experiences would have to be devised. In this study, it would have been useful to have a quantifiable measure of degree of commitment and degree of involvement to compare with play participants' attitudes on

pre- and post-tests. Instruments would have to be devised which would measure the status, the situational characteristics (decision-making frequency, etc.), and the nature of the incentive system for each different work experience. Sampling a number of people engaged in the same task experience could establish a set of fixed scales in terms of which any given job could be described. In this manner each job could be broken down and examined to see which elements of the task have the greatest instrumental reward and are most likely to have direct bearing on attitude acquisition and change. At present, the theory can allow explanations and successful predictions of changes across broad areas, general types of activities, and at a rather gross level of abstraction.

As indicated earlier, the overarching nature of task experience theory permits a number of sociological, psychological, and anthropological process variables and concepts to assist in explaining and predicting attitude acquisition and change. There is nothing in the task theory which would preclude calling upon identification, role playing, consistency, dissonance, stimulus-response, learning and cultural values theory and other theories to explain an attitude change. And perhaps this is one of task experience theory's major weaknesses--it has little, if anything, uniquely its own. Like Parsons' general theory of culture, values, and action patterns[1] it may be so effective at providing ethnographic and static descriptions of broad phenomena that the dynamic quality needed for specific precise predictions is missing. Nevertheless, the concept that task or work or job experiences facilitate the acquisition or change of certain attitudes is a valid one which educators should consider.

---

[1]Talcott Parsons, "Some Comments on the General Theory of Action," American Sociological Review, Vol. XVIII (1953).

Last, can the findings presented in this study be generalized to similar situations?

Statistically the basis for generalizations from this study is nonexistent. But the study can be replicated easily. In 1969 and again in 1970, approximately 900 high schools across the country produced The King and I. On the information available about the place of the arts in high school programs nationally,[1] it is safe to predict that at least 90 per cent of these productions were extracurricular, outside the normal school day and program. This study could be replicated each year in any public high school producing the play as an extracurricular activity. Ideally, the schools should also have an extracurricular speech and debate group and a group of nonparticipants. An experimental study involving randomization of subjects would allow for generalizations not permitted in this study. Indeed, if the major findings presented here are sound and to the unknown extent to which these two school settings are typical, any play production groups engaged in tasks similar to those described in this study should evidence similar attitude changes in the areas of dogmatism, rigidity, and attitudes toward self and others. The study could be replicated in other settings to see if the same findings emerge. The other attitudes measured may be tied closely to the behaviors and contents of the particular play The King and I. The information concerning the relationship between the formation or change of attitudes and extracurricular activities and tasks should be made available to educators engaged in

---

[1] Robert L. Buser summarizes a survey conducted by the National Association of Secondary School Principals on the current status and future of extracurricular activities for the 1970's. "Student Activities in the Schools of the Seventies," The Bulletin of the National Association of Secondary School Principals, LV (September, 1971), 1-9.

curriculum planning and concerned with the affective impact of the school on the student.

Are there alternative interpretations of the data? Could something other than the play production experiences account for the differences in the amount of attitude change among the groups? It is possible that the play production participants enjoyed such a unique and positive relationship with the faculty directors that any activity they sponsored would promote favorable attitudes. But the debate students enjoyed favored and positive relations with their faculty sponsors also. Both groups identified with the adult models. It is possible that morale was generally high at both schools when the post-tests were given. If so, the non-participants should have shown as much change as the participants. Possibly, the team membership, the peer associations, and camaraderie could have produced the positive attitude changes in the play production without the task experiences attendant to the production of The King and I. To investigate this notion, an athletic team or other highly motivated student group could have been included in the sample. However, the athletic teams of high status, football and basketball, were not active during the play production period and a number of the athletes were members of the play production and debate groups. If the single experience of role playing was responsible for most of the positive attitude change, why did the members of the crew evidence the same degree and direction of attitude change as the actors? Random selection of students and random assignment of students to groups would give strength to further investigations in this area. The limited evidence presented suggests that the task experiences of play production seemed to evoke a particular set of responses as measured by one set of instruments.

Implications

If the school is to accept responsibility for the development of a humane posture of beliefs, attitudes, and values it should examine critically the tasks assigned to students and the apparent affective and judgmental outcomes of these tasks. Schools have long considered the cognitive outcomes of academic tasks. Curriculum guides, budgets, project proposals for areas outside of the standard academic areas speak of the benefits of athletics, driver education, drama, debate, fine arts, etc., in terms of providing students with the ". . . ability to increase self-confidence, initiative, stability and self control"[1] and the necessity for ". . . understanding the responsibility of each team member."[2]

Considering the much publicized failure of our city schools in cognitive areas, perhaps a shift in attention is indicated. Maybe the curriculum should be devoted first to attitude-laden activities to effect the mutuality of effort between teachers and students so evident between faculty sponsors and extracurricular activity participants. The bond between the sponsor and the participant inheres in the fact that without unbearable imposition or boredom teachers and students are engaged in projects to which both are committed. The cognitive tasks must be accomplished if satisfaction is to be derived. The discipline necessary to accomplish the intellectual tasks is built into the activity, for the peer group establishes standards of behavior which it accepts the responsibility for enforcing. The pressure to memorize lines comes not from the faculty director, but from one's peers. The

---

[1] A Tentative Program in Drama for the Secondary School (Chicago: Board of Education, City of Chicago, 1965), p. 1.

[2] Physical Education for High School Boys, Curriculum Guide (Los Angeles: Los Angeles Public Schools, 1967), p. 3.

director is a resource to assist with techniques to accomplish the tasks.

Certainly it would be interesting to study the congruence of student and sponsor attitudes, whether faculty sponsors differ in attitudes from other faculty members, whether faculty members undergo the same kinds of attitude changes as do the students during the course of the play production activities. Longitudinal studies of the effects of play participants' experiences on their attitudes would perhaps provide, additional justification for the full support of these activities.

The trend indicating that nonparticipants seemed to become more closedminded than students who participated in extracurricular activities should be investigated further. Are students who do not elect to participate in an extracurricular activity more dogmatic than participants upon entry to high school? Do all students become more dogmatic from freshman through senior year? What implications does increasing dogmatism have for the schools? What responsibility does the school have for preparing students to live in a free pluralistic society? There have been sporadic efforts to humanize curricula and include the arts, but the efforts have been small and infrequent. Attacks on the problem have been piecemeal involving the introduction of a new course or new materials.

Another area of research indicated by the study relates to the universality of task experience theory. Assume the necessary tasks involved in producing this play are performed by German, French, or Japanese students of the same age, as an extracurricular activity with teachers serving as sponsors. Would student play participants in another culture evidence the same attitude changes as did those at North and South High? Would Japanese or German nonparticipants evidence the same attitude changes as those in this study? If the test results for the play

participants are different from those presented here, what are the variables in the school, the group, the individual, and the culture which negate the influence of these task experiences on attitude changes? What implications would cross-cultural studies of this kind have for the universality of task experience theory? Are there universal task experiences which can be incorporated into educational programs which tend to develop openminded, flexible, considerate human beings? It is discouraging that these activities would have to be justified in the American high school curriculum as therapy, prevention of juvenile delinquency, good public relations, etc.

Hovland's[1] studies indicated that the content of the message in role playing experiments was more important in producing attitude change than the source of the communication and the conditions under which the message was delivered. The content of the message was recalled months after the experience by the subjects. Though play participants can recall the content of the play script long after the production, the attitude changes they displayed seemed related to the production and rehearsal tasks and modes of accomplishing the tasks rather than to the attitudes expressed in the script. The pre-post test comparison of scores on the instrument based on the attitudes expressed in the script indicated role players did not change their attitudes to conform to those in the play. The experimental treatments were different in that Hovland's subjects did not have a long rehearsal period in a group setting before their role-playing episodes. However, it might be worthwhile to structure a set of play production treatments which allow some measure of the effects of the script content on attitude change in a play production situation. One

---

[1]Carl Hovland, "Studies in Social Psychology in World War II," Vol. III of Experiments in Mass Communication (Princeton: Princeton University Press), 1949. Also, Sherif and Hovland, Judgmental Phenomena and Scales of Attitude Measurement."

play could be selected in which the characters are required to express attitudes dissonant with the cooperative work mode required to produce the play. The script could contain lines which disparaged the worth of self and others. The script could present favorable reactions to the behavior and to the speech of dogmatic and inflexible characters. (Some of the plays of Brecht, Weiss, Jones, and other modern dramatists provide the appropriate contents.) Another situation could be structured where the attitudes expressed in the play script were consonant with the cooperative work mode, enhanced the worth of self and others and promoted openmindedness. (One of the many American musical plays which enjoy continuous popularity with amateur groups, Oklahoma, Annie Get Your Gun, The Sound of Music, etc., could be selected.) All during rehearsals the tasks required to produce the play would be performed in a comparable amateur setting, with a similar reward structure and with a set of subjects much like those in this study.

It is possible that the conflicting attitudes being promoted in the first dissonant situation might cancel any attitude change which could have occurred had the play script and the play production task experiences been consonant. In the second situation, theoretically, this set of consonant verbal and task experiences should be reflected in greater positive attitude change among participants.

It is also possible that the underlying cognition that in play acting or in debate one does not have to believe what one says may negate the influence of the script content on attitude change. However, it may also be that effects of the content of the message in the individually performed role playing episodes

which did influence the attitudes of Hovland's[1] subjects would not be the same in a group milieu. The added dimension of the shared ordeal of performing those tasks necessary to produce the play may be a more realistic way to look at attitude formation and change in the public schools. For cost-benefit purposes, it might be worthwhile to compare the attitudes and sequential changes shown by students in fine and performing arts schools with those of students of comparable intelligence and background in comprehensive traditional high schools in the same areas. Finally, a replication of the study involving random assignment of students to the three groups would expand the power of task experience theory to explain changes in attitudes, assuming the results were similar to those reported in this study.

Administrators, boards of education, and other agencies that allocate resources to various aspects of a high school program might investigate to determine who the most disaffected, frustrated, and least productive members of the student body are--the participants or the nonparticipants. Certainly, as Coleman[2] pointed out, the "Adolescent Society" can subvert the academic program of a school, but he also pointed out that rather than competition between the curricular and extracurricular areas, a bit of selective diffusion and assimilation would probably handle the status problems. Mass media make it evident: schools cannot

---

[1] Ibid. In Hovland's studies the subjects were given prepared communications expressing beliefs acceptable to them. Some subjects were required merely to read the communications; others were to perform and persuade audiences to accept what was being expressed as the role players' beliefs. Each subject rehearsed his material individually and performed alone. The role playing subjects experienced greater attitude change related to the content of the message delivered.

[2] James Coleman, The Adolescent Society: The Social Life of the Teenager and Its Impact on Education (Glencoe, Ill.: The Free Press, 1961).

just keep doing what they have been doing. A reallocation of resources is in order. This study examines one avenue for exploration.